

Standard Guidelines for Product Review

## **Lubricants for Galvanized Fasteners;**

### **Section 02560.00**

September 24, 2003

#### **02560.00 – Lubricants for Galvanized Fasteners**

Process - Submit the following:

- Preliminary Information for Product Evaluation Form.
- Independent Test Results showing compliance with Specs listed below.
- Legible copy of the MSDS.
- Spec Data Sheet.
- Detailed installation instructions.
- List of Limitations and Precautions.

#### **Specifications:**

The specifications regarding lubrication of galvanized fasteners are confusing and deserve some discussion. There are many different ASTM specifications for bolts, rods, and nuts, and many types and degrees of tightening. There are even requirements for tightening low-grade materials beyond snug tight. ODOT requirements for bolt tightening and lubrication also vary depending upon the type of structure. Proper lubrication is required for many of these connections, it is the intent of this Guideline to provide a clear list of suitable materials for the Qualified Product List (QPL).

ODOT Specification 2560 requires the use of ASTM A563 Gr.DH nuts with all galvanized fasteners, galvanized anchor bolts, and galvanized tie rods. ASTM A563 requires lubrication of all Grade DH nuts, and Specification 2560 further requires that the lubricant contain a visible dye for verification purposes. The lubricant must be clean and dry to the touch.

Specification 2560 also requires that galvanized bolts in tapped holes, galvanized anchor bolts, and galvanized tie rods must be field lubricated with a lubricant from the QPL.

ODOT Specification 2560 requires rotational capacity tests for all high strength fasteners except anchor bolts and tie rods, to verify the effectiveness of the lubricant. This test must be repeated at the job site, unless noted otherwise. This test is not the same as the ASTM A325 rotational capacity test, and must be performed according to Specification 2560.

#### **Submit documentation to:**

Oregon DOT  
Mike Dunning  
800 Airport Road SE  
Salem OR 97301-4798  
503-986-3059

**Please send no samples at this time.**